

Aerosol group meeting discussions

May 2004

Intercomparison of met fields/direct forcing

- Use OH fields from Michigan
- Treatment of boundary layer:
 - CCM: K_{zz} from met fields -- done
 - DAO: K_{zz} from met fields -- done
 - Giss: Adopt Trop group's solution or e-fold to constant K_{zz} in BL
- Comparison to data: Michigan
- Forcing: Michigan/Illinois
- Write paper

Indirect forcing: intercomparison of met fields/methods

- Code results to Thanos
 - CCM: Use Kzz to get cloud updrafts
 - Rerun DAO to save cloud fields: use Kzz to get cloud updrafts
 - GISS – no Kzz: can't do these?
 - FVGCM fields—Thanos to check fields to save

Aerosol microphysics (start Aug 1)

- Add UMaer model to DAO, CCM, GISS (2 months)
- Run all met fields (2 months if 16 processors)
- Analysis and comparison to data (Michigan)
- WE WILL BE OUT OF MONEY

Aircraft effects

- Run aircraft perturbation studies (Don/Steve to design and analyze)

Future considerations

- Dust/sea salt consistent with winds
 - Use u^* for 10 m winds?
- Add OCS, AER microphysics
- Run with assimilated winds: ECMWF, NCEP, updated GEOS
- Couple with GCM:
 - GFDL
 - NCAR
 - HACCM
 - CAM